RM15TA-24,-2H

HIGH VOLTAGE MEDIUM POWER GENERAL USE
INSULATED TYPE

RM15TA-24,-2H

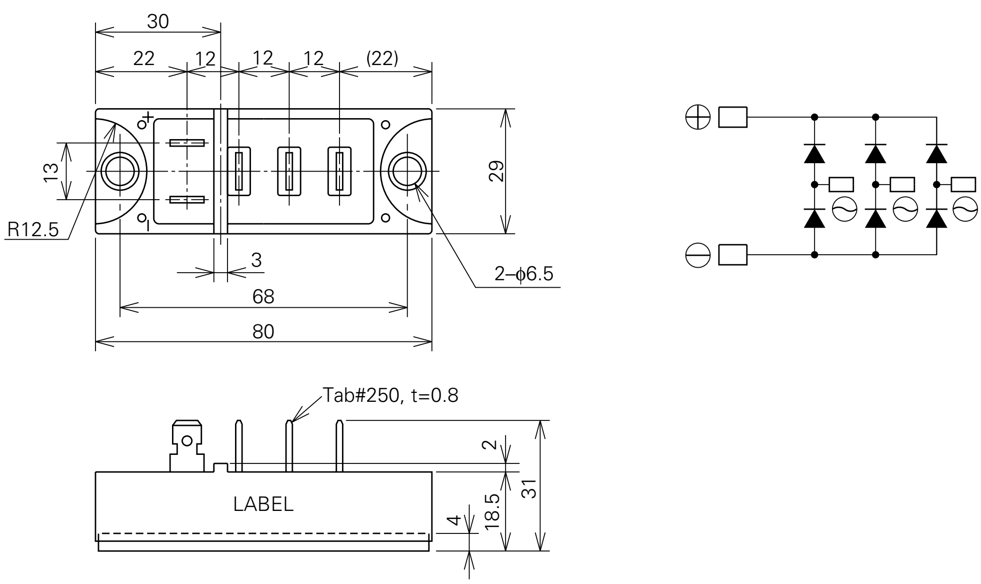


- **IO** DC output current **30A**
- **VRRM** Repetitive peak reverse voltage **1200/1600V**
- **3 phase bridge**
- **Insulated Type**
- **UL Recognized**
  Yellow Card No. E80276 (N)
  File No. E80271

APPLICATION

AC motor controllers, DC motor controllers, Battery DC power supplies,
DC power supplies for control panels, and other general DC power equipment

OUTLINE DRAWING & CIRCUIT DIAGRAM Dimensions in mm



Feb.1999

MITSUBISHI
ELECTRIC

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Voltage class		Unit
		24	2H	
V_{RRM}	Repetitive peak reverse voltage	1200	1600	V
V_{RSM}	Non-repetitive peak reverse voltage	1350	1700	V
E_a	Recommended AC input voltage	370	440	V

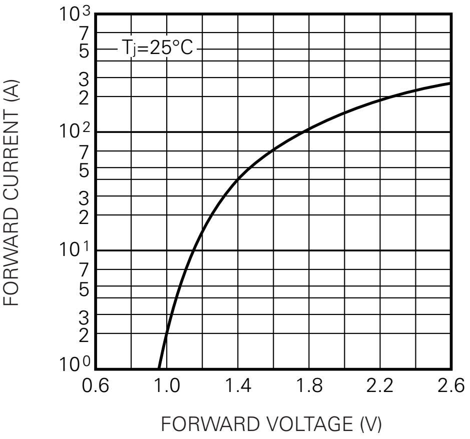
Symbol	Parameter	Conditions	Ratings	Unit
I_O	DC output current	Three-phase full wave rectifying circuit, T_C=97°C	30	A
I_{FSM}	Surge (non-repetitive) forward current	One half cycle at 60Hz, peak value	300	A
I^2t	I^2t for fusing	Value for one cycle of surge current	3.8×10^2	A^2s
f	Maximum operating frequency		1000	Hz
T_j	Junction temperature		–40~+150	°C
T_{stg}	Storage temperature		–40~+125	°C
V_{iso}	Isolation voltage	Charged part to case	2500	V
—	Mounting torque	Mounting screw M6	1.96~2.94	N·m
			20~30	kg·cm
—	Weight	Typical value	120	g

ELECTRICAL CHARACTERISTICS

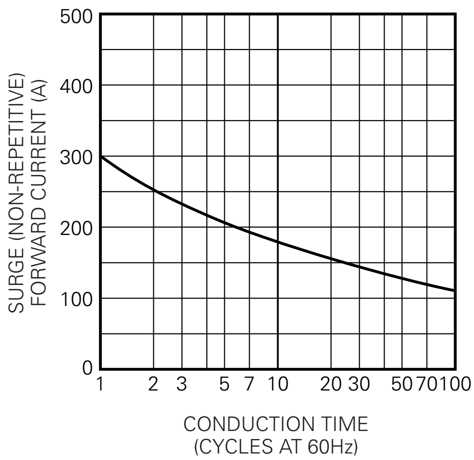
Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
I_{RRM}	Repetitive reverse current	T_j=150°C, V_{RRM} applied	—	—	2.0	mA
V_{FM}	Forward voltage	T_j=25°C, I_{FM}=30A, instantaneous meas.	—	—	1.35	V
$R_{th (j-c)}$	Thermal resistance	Junction to case	—	—	0.65	°C/W
$R_{th (c-f)}$	Contact thermal resistance	Case to fin, conductive grease applied	—	—	0.1	°C/W
—	Insulation resistance	Measured with a 500V megohmmeter between main terminal and case	10	—	—	MΩ

PERFORMANCE CURVES

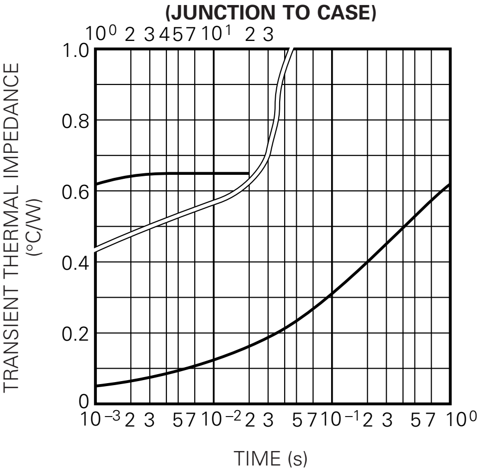
MAXIMUM FORWARD CHARACTERISTIC



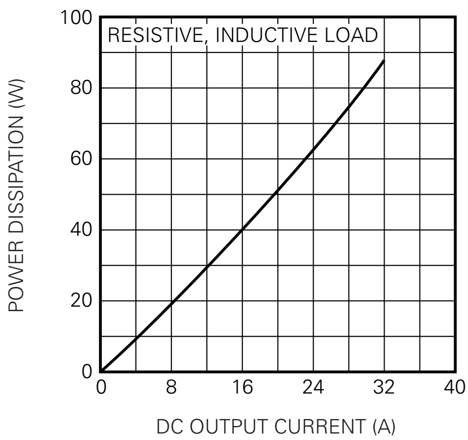
ALLOWABLE SURGE (NON-REPETITIVE) FORWARD CURRENT



MAXIMUM TRANSIENT THERMAL IMPEDANCE (JUNCTION TO CASE)



MAXIMUM POWER DISSIPATION



ALLOWABLE CASE TEMPERATURE VS. DC OUTPUT CURRENT

